Fault-Tolerant System and Methods With Trusted Message Acknowledgement

5   Abstract of the Disclosure

Improved methods for providing fault tolerance in a distributed computer system utilize an explicit, delayed acknowledgement message protocol to send an acknowledgement message to a workflow-requesting entity, such as a load manager

10   and/or a requesting client, only upon completion of a workflow. The system includes workflow engines operating as a distributed queue group to load-balance processing requests from clients. The system also has a certified messaging capability that guarantees delivery of any message sent by a certified message sender by maintaining a persistent record of the message until an acknowledgement message is received back

15   from the certified message receiver. In the event a hardware or software failure occurs during a workflow execution, the workflow is reassigned to a different workflow engine. Improved fault-tolerant computers and computer networks are also described.